Remarks

In the non-final Office Action dated March 17, 2009, it is noted that claims 1 – 35 are pending in the application. Claims 1, 12, 18, 21, 25, 29, 30, 32 and 34 are independent.

Claim 18 has been amended to correct a minor, inadvertent mistake. No new matter has been added.

Objection to the Specification for failing to provide proper antecedent basis for the claimed subject matter

In the Office Action, it is alleged that the specification is devoid of terms such as "computer usable medium" as recited in claim 21. Applicants respectfully point out that in Applicants' previous response, dated December 1, 2008, Applicants amended the specification by adding the following paragraph:

"In another embodiment of the invention, a computer program product containing a computer usable medium having computer readable code embodied therein, the computer readable code, when executed, causing a computer to implement a method for facilitating the transferring of a content file from a remote content provider to a cache server at an access point and later to a local content user client device containing: providing a proxy that facilitates the downloading of a content file to a cache server from a remote content provider over the Internet using Internet protocol; and transmitting the proxy to a cache server capable of using the proxy to download the content file from the remote content provider over the Internet and later transfer the downloaded content file to the client device. The implemented method may further comprise obtaining parameters including at least the identity of the content file, the identity of the content provider, the identity of the cache server, and identity of the content user; and in the implemented method, the providing a proxy may comprise providing a proxy using the obtained parameters. Moreover, in the implemented method, the obtaining parameters may comprise capturing a content user request to the content provider for permission for the cache server to download the identified content file; and extracting at least some of the parameters from the captured request. Furthermore, in the implemented method, the providing a proxy may comprise providing a proxy including computer code which, when executed, causes the content file to be downloaded from the content provider." (Emphasis added)

The above paragraph explicitly contains the term "computer usable medium" and thus the specification is consistent with terms recited in claim 21. Withdrawal of the objection to the specification is respectfully requested.

Rejection of claims 1 – 4, 6, 8 – 29 and 32 – 35 under 35 U.S.C. 102(e) as being anticipated by Ott et al. (US 20050128995 A1, hereinafter "Ott")

Applicants submit that, for at least the following reasons, claims 1 – 4, 6, 8 – 29 and 32 – 35 are patentable over Ott.

<u>Independent claims 1, 25, 29 and 34</u>

Claim 1 recites, in part:

> "*A system for obtaining <u>at least one content file requested by a content user</u> from at least one content provider for remote site downloading at an access point and delivering the at least one content file after arrival of the content user at the access point, ... ,*
> *the system comprising a cache server having*
> *...*
> *means to <u>download the at least one content file</u> from the at least one content providers over the data network upon receipt of a proxy,*" (Emphasis added)

The Office Action alleged that Ott (at least FIG. 1, 110 and 140 and related text, paragraph [0053]) discloses the above claimed features. Applicants respectfully disagree.

In discussing FIG. 1, Ott's paragraph [0053] specifically teaches that mobile devices share their "interest profiles" with the hotspots they enter. "The hotspots 130 themselves <u>use these profiles 120 to predict the interest profile of the devices visiting them</u>," and then, "subscribe with <u>this combined profile to a semantic multicast network</u> which will deliver new and relevant content to the I-Stations 130" (emphasis added).

Thus, the content downloaded to a hotspot (I-Station) is based on a single, <u>combined profile</u> predicted from the interest profiles of different mobile devices, and the content "carries a content descriptor which matches the I-Station's information profile" (Ott, para. [0053]).

As such, the content download, as taught by Ott, is clearly different from Applicants' claim 1, because Ott does <u>not</u> teach downloading content based on a content file <u>requested</u> by a user. Instead, Ott's method is directed towards data caching and opportunistic delivery of content based on user preferences (e.g., para. [0005]).

For example, in paragraph [0038], Ott teaches that one benefit of this approach is that content needs become <u>predictable</u>, so that, "[i]nstead of having to respond to a specific user

request immediately, <u>content can be downloaded pro-actively</u> at a more opportune times"
(emphasis added).

Thus, Ott clearly <u>teaches away</u> from the approach of downloading or obtaining content
file requested by a user.

The approach of pro-actively downloading content based on predicted needs finds support
in many other sections of Ott, including, for example:

Paragraph [0042]:

"[t]he <u>information profile of the I-Station</u>, which <u>determines the content it</u>
<u>actively collects</u>, is <u>created from a prediction of the interest profiles of mobiles</u>
<u>visiting in the future</u>. The described exemplary embodiment uses an
aggregation over the last N visiting mobiles with the assumption that user's
interests change slowly over time and they also regularly visit the same
places." (emphasis added)

Paragraph [0050]:

"performing <u>pro-active caching of data that might be of interest to future</u>
<u>visitors to the I-[Station] using the interest profiles of past visitors and visitors</u>
<u>to surrounding I-Stations</u>; opportunistically scheduling the I-station's cache
data transfer over the back-haul channel to maintain the quality-of-service of
other real-time traffic sharing the wireless hot-spot access point;" (emphasis
added)

Paragraph [0083]:

"an I-Station is a hotspot that additionally includes a <u>data cache which is pro-</u>
<u>actively filled with information expected to be useful to the visiting mobile</u>
<u>devices</u>." (emphasis added)

Since Ott clearly teaches pro-actively downloading content files based on predicted
needs, but <u>not based on a user's file request</u>, Ott does <u>not</u> teach a system for obtaining at least one
content file requested by a content user, as provided in claim 1. Therefore, Applicants submit
that claim 1 is patentable over Ott.

Similar to claim 1, independent claims 25, 29 and 34 each includes a feature relating to
either caching, receiving, or downloading a content file based on a user request or input.

Independent claim 25 recites, in part:

"*A method of caching at least one content file at an access point for at least one content user who has <u>requested, prior to being present at the access point, the at least one content file to be downloaded</u> from a content server and stored for delivery when the at least one content user is present at the access point comprising*
upon receipt at a cache server of <u>a message which identifies a request for the at least one content file ordered by the at least one content user</u> prior to the at least one content user being present at the access point hot spot, downloading the at least one content file from the content server;" (emphasis added)

Independent claim 29 recites, in part:

"*receiving at an access point wireless network <u>an authenticated download order for a content file request</u> from the content user mobile device.*"
(emphasis added)

Independent claim 34 recites, in part:

"*programming in the mobile device which causes the mobile device, in response to <u>content user input</u>, to provide parameters to a cache server, the <u>parameters including at least the identity of the content file to be downloaded and the identity of the content provider server and the cache server</u>.*"
(emphasis added)

For at least the same reasons set forth above in connection with claim 1, Applicants submit that claims 25, 29 and 34 are also patentable over Ott. Furthermore, these claims are patentable over Ott for the following additional reasons.

Regarding claim 25, Ott's paragraphs [0014], [0053], [0054] were cited (on page 11, Office Action) for allegedly teaching the features relating to the receipt at the cache server of a message that identifies a request for at least one content filed ordered by the content user. However, since the only information shared with the I-Stations by a user is the interest profile of the user, and the cited sections do <u>not</u> teach that the profile identifies a request for a content file ordered by the user, Applicants submit that Ott also does not teach the features relating to the message, as provided in claim 25.

Regarding claim 29, the Office Action (bottom of page 12) cited FIG. 1, publisher 150 and related text (i.e., paragraphs [0053]-[0055]) for allegedly teaching the features related to receiving an authenticated download order for a content file request. However, there is no

teaching in the cited sections that a user's interest profile received at the I-Station is an authenticated download order. Instead, the users' interest profiles are used by the I-Stations to generate a combined profile to predict content needs of mobile users that will be visiting the stations, and content are obtained from a network based on this combined profile. As such, Ott's FIG. 1 and related text do <u>not</u> teach an authenticated download order for a content file, as provided in claim 29.

Regarding claim 34, Ott's FIG. 1, mobile devices 110, interest profile 120 and related text were cited (on page 14, Office Action) for allegedly teaching the features relating to parameters provided to a cache server. However, since there is no teaching in FIG. 1 or related text that the information provided to a I-Station (e.g., a user's interest profile shared with the I-Stations) contains parameters including at least the identity of the content file, the identity of the content provider server and the cache server, Applicants submit that the cited portions of Ott also do <u>not</u> teach at least the features relating to the parameters in claim 34.

Therefore, claims 25, 29 and 34 are also patentable over Ott.

Independent claims 12, 18, 21 and 32

Independent claim 12 recites, in part:

> *"means for generating a <u>proxy that identifies the content file, content provider, and content user;</u> and*
> *means for transmitting the proxy to a cache server at an access point."*
> (emphasis added)

Applicants submit that none of the cited paragraphs [0009], [0018], or [0055] (page 5, Office Action) discloses means for generating a proxy, as provided in claim 12.

For example, paragraph [0009] teaches that content from a content provider is received at a wireless base station (i.e., an I-Station), which "includes an information profile and stores the content that matches the information profile in a storage device." Furthermore, data packets for transmission to the wireless device are generated based at least in part on the received interest profile and the received cache directory.

As discussed above in connection with claim 1, the information profile of an I-Station is a combined profile that is predicted from the interest profiles of a number of different mobile users. Thus, the content received at the I-Station merely reflects matching with the <u>combined,</u>

predicted profile, but not a content file identified in a proxy that also identifies the content provider and content user.

Paragraph [0018] and paragraph [0055] provide similar teaching, e.g., that the wireless base station stores the content that matches the information profile (i.e., the combined profile at the station), and that I-Stations subscribe to services via dynamically created "information profiles" used by the network to route relevant data to each subscriber, i.e., I-Station.

As such, there is simply <u>no teaching</u> in paragraphs [0009], [0018] and [0055] regarding means for generating a proxy that "identifies the content file, content provider, and content user," and means of transmitting the proxy to a cache server, as provided in claim 12. In view of at least the foregoing, Applicants submit that claim 12 is patentable over Ott.

In rejecting independent claims 18, 21 and 32, the Office Action (pages 7-10 and 13) cited at least Ott's FIG. 1, I-Stations 130 and related text, paragraphs [0014], [0053] and [0054], for allegedly teaching various claimed features relating to the proxy. Applicants disagree with this interpretation of Ott's teaching.

Similar to claim 12, independent claims 18, 21 and 32 each recites a proxy, with respective features that are <u>not</u> taught in the above cited sections of Ott.

For example, independent claim 18 recites, in part:

> "*means in the cache server for <u>receiving and decoding a proxy</u> containing <u>parameters comprising an identification of the content file to be downloaded and the Internet address of the content provider</u>;
> means for using the proxy to download the identified content file to the cache server;*" (emphasis added)

As previously discussed, Ott's FIG. 1 (and related text) teaches the I-Stations obtaining content based on a combined interest profile predicted from a number of user interest profiles. It is not clear, however, based on the Office Action, as to which specific element in FIG. 1 is deemed to correspond to the proxy of Applicants' claimed invention.

For arguments' sake, it is assumed that the individual interest profile corresponds to the proxy. Applicants submit that there is no teaching in FIG. 1 regarding decoding the individual interest profile, and that the profile contains parameters including an identification of the content file to be downloaded and the internet address of the content provider, as provided in claim 18.

Furthermore, the I-Station uses a combined interest profile to download content matching this combined profile. Since there is also no teaching in FIG. 1 and related text that the combined profile specifically identifies a content file requested by a user, Applicants submit that the cited sections of Ott also do <u>not</u> teach using the proxy to download the identified content file, as provided in claim 18. Therefore, claim 18 is patentable over Ott.

Independent claim 21 recites, in part:

> "*providing a <u>proxy</u> that facilitates the downloading of a content file to a cache server from a remote content provider over the Internet using Internet protocol; and <u>transmitting the proxy to a cache server capable of using the proxy to download the content file</u> from the remote content provider over the Internet ...*" (emphasis added)

Independent claim 32 recites, in part:

> "*providing a <u>proxy</u> that facilitates the downloading of the content file from the content provider server;
> <u>transmitting the proxy to a cache server at an access point enabled to execute the proxy to download the content file</u> from the remote content provider server ...*" (emphasis added)

For reasons similar to those set forth above for claims 12 and 18, Applicants submit that the cited sections of Ott do not teach using or executing a proxy to download the content file, and claims 21 and 32 are therefore also patentable over Ott.

Claims 2 – 4, 6, 8 – 11, 13 – 17, 19 – 20, 22 – 24, 26 – 28, 33 and 35 are also patentable at least because they respectively depend from claims 1, 12, 18, 21, 25, 29, 32 or 34.

Withdrawal of the rejection of claims 1 – 4, 6, 8 – 29 and 32 – 35 under 35 U.S.C. 102(e) is respectfully requested.

Rejection of claim 5 under 35 U.S.C. 103(a) as being unpatentable over Ott in view of Milkey et al. (US 2002/0273514 A1, hereinafter "Milkey")

Since there is no showing in the Office Action that Milkey cures the defects present in Ott as discussed above for claim 1, claim 5 is also patentable for at least the reason that it depends from claim 1. Withdrawal of the rejection of claim 5 under 35 U.S.C. 103(a) is respectfully requested.

Rejection of claims 7, 30 and 31 under 35 U.S.C. 103(a) as being unpatentable over Ott in view of Sidles (US 2002/0062342 A1)

Independent claim 30 recites, in part:

> "*A method for* <u>*ordering a content file*</u> *over a first network from a remote content provider at a first time and receiving the content file at a second time over an access point network* comprising:
>
> ...
>
> *sending order identification data comprising a URL of the content file and a session specific cookie to the access point;* <u>*responsive to reception of the order identification data at the selected access point,*</u>
> <u>*downloading the content file from the content provider server and storing the*</u>
> <u>*content file*</u> *in storage cache in the access point network;*" (emphasis added)

As discussed above for claim 1, Ott fails to disclose that the content file to be downloaded is requested or ordered by a user. Rather, the content in Ott is downloaded only based on predicted needs represented by a combined profile at an I-Station.

Furthermore, Ott's paragraphs [0014], [0053]-[0054] were cited for allegedly teaching the features of: responsive to reception of the order identification data at the selected access point, downloading the content file from the content provider server and storing the content file in storage cache. However, there is no teaching in these paragraphs that any order identification data (which includes URL of a content file and a session specific cookie to the access point) was received at the I-Station for downloading the identified content file.

Since there is no showing in the Office Action that Sidles cures the defects present in Ott with respect to claims 1 and 30, claim 30 is also patentable over Ott and Sidles; and claims 7 and 31 are patentable at least because they respectively depend from claims 1 and 30.

Withdrawal of the rejection of claims 7, 30 and 31 under 35 U.S.C. 103(a) is respectfully requested.

Conclusion

Having fully addressed the Examiner's rejections, it is believed that, in view of the preceding amendments and remarks, this application stands in condition for allowance. Accordingly, reconsideration and allowance are respectfully solicited. If, however, the Examiner believes that there are unresolved issues, the Examiner is invited to contact the Applicant's attorney at (609) 734-6834, so that a mutually convenient date and time for a telephonic interview may be scheduled.

Respectfully submitted,
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